

# Re: abundance of irrationals!

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*Source:* <http://sci.tech-archive.net/Archive/sci.math/2005-05/msg03057.html>

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- *From:* Tony Orlow (aeo6) <aeo6@xxxxxxxxxxxx>
  - *Date:* Mon, 16 May 2005 10:37:48 -0400
- 

Virgil said:

> In article <MPG.1ceedd05baefca52989c51@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>,  
> Tony Orlow (aeo6) <aeo6@xxxxxxxxxxxx> wrote:

>

>> Virgil said:

>>> In article <MPG.1ceea621fe0d3b63989c3a@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>,

>>> Tony Orlow (aeo6) <aeo6@xxxxxxxxxxxx> wrote:

>>>

>>>> Virgil said:

>>>>> In article <MPG.1ced3bf54b70fa1e989c2c@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>,

>>>>> Tony Orlow (aeo6) <aeo6@xxxxxxxxxxxx> wrote:

>>>>>

>>>>>> I didn't disagree that the branches (or paths, as I

>>>>>> called them) are infinitely long. Our disagreement

>>>>>> is this: you think this invalidates my earlier claim

>>>>>> (that each node in the tree is represented by a finite

>>>>>> path) and I do not.

>>>>>> if a branch is infinitely long, how long is the string of bits that

>>>>>> specifies

>>>>>> the node at the end (or finitely close to the end) of that branch? If

>>>>>> the

>>>>>> node

>>>>>> is infinitely far down a branch, it requires infinite bits, one for

>>>>>> each

>>>>>> fork.

>>>>>

>>>>>> But no nodes are "infinitely far" down a branch. That is the same error

>>>>>> that TO makes with naturals, assuming that there has to be an infinite

>>>>>> one. Apparently he does not learn from his mistakes.

>>>>>

>>>>>> You said the branches extend infinitely far from the root, but each

>>>>>> branch is

>>>>>> bounded by two nodes. Are those nodes, to the near and far side of that

>>>>>> infinitely far away branch, both finitely far from the root,

>>>>

>>>> Yes!

>>>>

>>>>

>>>>> and both closer

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>>>> than the branch they define?

>>>

>>> NO, each node (except the root node) is at the \_farther\_ end of the

>>> branch which extends to it.

>> So, that branch infinitely far from the root, has a node at the end of it

>> that

>> is closer to the root than it is?

>

> No!

>

> If any node or branch were to be infinitely far from the root, so would

> be all nodes and branches attached to them by any finite chain of nodes

> and branches, so would still be just as far away.

>

And if they were attached by an infinite path, they could be finitely away from the root. So? What is that supposed to prove?

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Smiles,

Tony

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• *Follow-Ups:*

◆ *Re: abundance of irrationals!*

◇ *From:* Virgil

• *References:*

◆ *Re: abundance of irrationals!*

◇ *From:* mueckenh

◆ *Re: abundance of irrationals!*

◇ *From:* Randy Poe

◆ *Re: abundance of irrationals!*

◇ *From:* aeo6

◆ *Re: abundance of irrationals!*

◇ *From:* Russell

◆ *Re: abundance of irrationals!*

◇ *From:* aeo6

◆ *Re: abundance of irrationals!*

◇ *From:* Russell

◆ *Re: abundance of irrationals!*

◇ *From:* aeo6

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◇ *From:* aeo6

◆ *Re: abundance of irrationals!*

◇ *From:* Virgil

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◆ **Re: abundance of irrationals!)**

◇ From: aeo6

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◇ From: Virgil

◆ **Re: abundance of irrationals!)**

◇ From: aeo6

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◇ From: Virgil

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